

APPENDIX C

ADEQ TMDL PRIORITY RANKING AND SCHEDULE

ASSESSMENT UNIT	POLLUTANT (YEAR LISTED)	DISCUSSION	PRIORITY RANKING AND TMDL SCHEDULE
Bill Williams Watershed			
Alamo Lake 15030204-0040 1,414 acres	Ammonia (2004), high pH (1996)	Ammonia, and high pH may be symptoms of narrative nutrient violations, and may indicate that toxic conditions are occurring for lake aquatic life. Ongoing monitoring by the US Fish and Wildlife Service (contracted by the US Army Corps of Engineers) should provide data needed to support TMDL development. Medium	Initiate in 2013.
	Mercury (2002- EPA)	A mercury fish consumption advisory was issued in 2004. Fish in this lake are also a food source for the bald eagle, a federally listed as Threatened species. The lake supports significant sport fishing.	High Initiated in 2004.
Bill Williams River Alamo Lake to Castaneda Wash 15030204-003 35.9 miles	Ammonia and high pH (2006)	Ammonia is considered toxic to aquatic life and low dissolved oxygen and high pH may pose further stresses on the aquatic community. These stressors are generally associated with excess nutrients. To coordinate with Alamo Lake TMDL development as this reach receives the discharge from Alamo Lake, and is therefore, the probable source of the water quality problems.	Medium Initiate in 2013.
Coors Lake 15030202-5000 230 acres	Mercury (2004)	Coors Lake is on Butte Creek, a tributary to Boulder Creek. A fish consumption advisory due to mercury contamination was issued in 2004. Low priority ranking is contingent on restricting fishing at this privately owned lake.	Low Initiate in 2017.
Boulder Creek Tributary at 344114/1131800 to Wilder Creek 15030202-006B 14.4 miles	Beryllium (dissolved) (2010)	This segment of Boulder Creek is located upstream of the Hillside and FMI Bagdad mines. There are several small mines located within the reach which may contribute beryllium to Boulder Creek.	Low To initiate in 2015.
Colorado-Grand Canyon Watershed			
Colorado River Lake Powell to Paria River 14070006-001 16 miles	Selenium (total) (2006)	This Colorado River Selenium TMDL will be complex due to the size of the drainage area, natural background, and contributions from other states and tribal lands. ADEQ will coordinate development of selenium TMDLs along the Colorado.	Low Initiated in 2011.
Colorado River Parashant Canyon to Diamond Creek 15010002-003 28 miles	Selenium (total) (2004)	ADEQ will be coordinating development of selenium TMDLs along the Colorado River, see Lake Powell to Paria River discussion above.	High Initiated in 2011.
	Suspended sediment concentration (2004)	Sediment may pose a threat to aquatic life. The Paria and Little Colorado Rivers are major sources of sediment to the Colorado and would need to be included in the future TMDL analyses, see Paria River discussion below.	Low Initiate in 2014.
Paria River Utah border to Colorado River 14070007-123 29 miles	Suspended sediment concentration (2004)	Prior monitoring and investigations in this drainage should help support TMDL development; however, further investigation is needed to determine source loadings, especially contributions from natural background in this sandstone geology. Source contributions from Utah may also make this TMDL more complex.	Low Initiate in 2014.
	<i>E. coli</i> (2006)	Exceedances of <i>E. coli</i> criteria may represent a significant public health concern if people are swimming or even wading in the water; however, this is a relatively remote canyon, with light recreational use. This TMDL is complex due to source contributions from Utah.	Medium Initiate in 2014.

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Virgin River Beaver Dam Wash to Bend Wash 15010010-003 10 miles	Selenium (total) (2004)	Further investigation is needed to determine selenium source loadings. Determining contributions from Utah and natural background sources will make developing this TMDL more complex.	Low Initiate in 2015.
	Suspended sediment concentration (2004)	Sediment may pose a threat to aquatic life. The Virgin River originates in Utah making this a multijurisdictional TMDL study.	Low Initiate in 2015.
	<i>E. coli</i> (2010)	Exceedances of <i>E. coli</i> bacteria criteria may represent a public health concern if people are swimming or even wading in the water. Exceedances routinely occur during high flow events where recreational activities would be at a minimum.	Low Initiate in 2015.
Colorado-Lower Gila Watershed			
Colorado River Hoover Dam to Lake Mohave 15030101-015 40 miles	Selenium (total) (2004)	ADEQ will be coordinating development of selenium TMDLs along the Colorado River, see Colorado River (Lake Powell to Paria River) discussion above.	High Initiated in 2011.
Colorado River Bill Williams River to Osborne Wash 15030104-020 13.4 miles	Selenium (total) (2010)	ADEQ will be coordinating development of selenium TMDLs along the Colorado River, see Colorado River (Lake Powell to Paria River) discussion above.	High Initiated in 2011.
Colorado River Main Canal to Mexico border 15030107-001 32 miles	Selenium (total) (2006)	ADEQ will be coordinating development of selenium TMDLs along the Colorado River, see Colorado River (Lake Powell to Paria River) discussion above.	High Initiated in 2011.
	Low dissolved oxygen (2006)	Low dissolved oxygen may be a symptom of excess nutrient loadings, and may be stressful to aquatic life. These TMDLs may be complicated by the large number of potential sources as the Colorado River drainage area covers many states in the Southwest.	Low Initiate in 2017.
Colorado River Imperial Dam to Gila River 15030107-003 15.3 miles	Selenium (total) (2010)	ADEQ will be coordinating development of selenium TMDLs along the Colorado River, see Colorado River (Lake Powell to Paria River) discussion above.	High Initiated in 2011.
Gila River Coyote Wash to Fortuna Wash 15070201-003 28.3 miles	Boron (total) and selenium (total) (2004)	The federally protected Yuma clapper rail occurs in this area and could be negatively impacted by elevated levels of selenium as it bioaccumulates in prey species. Boron may impact downstream agricultural uses, but present a low ecological and human health risk. Both elevated selenium and boron may be associated with the extensive irrigated agriculture in the greater Yuma area.	High Initiate in 2012.
Lake Mohave 15030101-0960 27044 acres	Selenium (total) (2010)	ADEQ will be coordinating development of selenium TMDLs along the Colorado River, see Colorado River (Lake Powell to Paria River) discussion above.	High Initiated in 2011.
Painted Rocks Borrow Pit Lake 15070201-1010 186 acres	Low dissolved oxygen (1992)	A diagnostic feasibility study by ADEQ in 1992 concluded that the design and maintenance of this shallow lake was the primary cause of the low dissolved oxygen. Drought conditions have left the lake dry during most of the past five years. The lake is no longer stocked with fish and does not have recreational uses because of the pesticide contamination (see below).	Low TMDL will be initiated when the lake refills and representative samples can be collected.
	DDT metabolites, toxaphene, chlordane in fish tissue (2002- EPA)	(See discussion and schedule in Middle Gila – Painted Rocks Pesticide Contamination) TMDL will be coordinated with pesticide TMDLs in the Middle Gila.	High Initiate when Lake maintains a stable pool.

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Little Colorado Watershed			
Bear Canyon Lake 15020008-0130 55 acres	Low pH (2004- EPA)	This is an important fishing and recreational area. Low pH may be a symptom of narrative nutrient violations and may stress aquatic life in the lake. Narrative nutrient implementation guidance, when adopted, will be used to determine if low pH values are related to excess nutrients. Investigation and monitoring is needed to identify sources.	Medium Initiate in 2011.
Black Canyon Lake 15020010-0180 37.4 acres	Ammonia (2010)	High ammonia may be a symptom of narrative nutrient violations, and may indicate that toxic conditions are occurring for lake aquatic life.	Medium Initiate in 2014.
Little Colorado River Silver Creek to Carr Wash 15020002-004 6 miles	<i>E. coli</i> (2004)	Exceedances of <i>E. coli</i> criteria may represent a significant public health concern if people are swimming or even wading in the water. Exceedances may be related to wet weather events.	High Initiated in 2007.
	Suspended sediment concentration (2006)	Sediment may pose a threat to aquatic life. The drainage is more than 8,000 square miles, so determining the source of contamination may be complex. Substantial monitoring data is needed to identify sources. Dates reflect that both TMDLs will be developed at the same time.	Medium Initiated in 2007.
Lyman Lake 15020001-0850 1308 acres	Mercury in fish tissue (2004- EPA)	A fish consumption advisory for mercury was issued in 2002. Excess mercury in fish tissue can be toxic to humans and other animals that eat the fish. This lake is an important recreational area. Additional monitoring is needed to identify sources.	High Initiated in 2008.
Pintail Lake 15020005-5000 25.7 acres	Ammonia (2010)	Pintail and Telephone lakes receive effluent from the City of Show Low WWTP. High ammonia values may be related to the discharge.	Low Initiate in 2017.
Puerco River Dead Wash to Ninemile Wash 15020007-007 0.2 miles	Copper (dissolved) (2010)	Copper poses a risk to aquatic life and wildlife. Several additional parameters exceeded standards but consistently enough to meet the impairment criteria.	Medium Initiate in 2015
Telephone Lake 15020005-1500 22.3 acres	Ammonia (2010)	Pintail and Telephone lakes receive effluent from the City of Show Low WWTP. High ammonia values may be related to the discharge.	Low Initiate in 2017.
Middle Gila			
Agua Fria River Sycamore Creek to Big Bug Creek 15070102-023 9.1 miles	<i>E. coli</i> (2010)	Exceedances of <i>E. coli</i> bacteria criteria may represent a public health concern if people are swimming or even wading in the water.	Medium Initiate in 2015.
Alvord Park Lake 15060106B-0050 27 acres	Ammonia (2004)	Ammonia poses a significant threat to aquatic life due to its toxic nature. This lake is an important urban recreational area. More investigation is needed to determine the source of the pollutants.	High Initiated in 2007.
Arnett Creek Headwaters to Queen Creek 15050100-1818 11.1 miles	Copper (dissolved) (2010)	Copper poses a risk to aquatic life and wildlife. The segment will be included in the ongoing Queen Creek Copper TMDL.	Medium Initiated in 2004 as part of Queen Creek copper TMDL.
Chaparral Lake 15060106B-0300 13 acres	Low dissolved oxygen (2004)	Narrative nutrient implementation guidance, when adopted, will be used to determine if the low dissolved oxygen is related to excess nutrients in the lake. Excess nutrient loads and low dissolved oxygen can stress aquatic life and would be detrimental to this important urban recreational area. Investigation and monitoring is needed to identify sources.	Medium Initiated in 2007.
	<i>E. coli</i> (2004)	Although exceedances of <i>E. coli</i> bacteria represent a risk to public health, swimming or wading in the lake are prohibited. However, this is an important recreational area.	Medium Initiated in 2007.

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Cortez Park Lake 15060106B-0410 1.9 acres	Low dissolved oxygen and high pH (2004)	Narrative nutrient implementation guidance, when adopted, will be used to determine if the low dissolved oxygen and high pH is related to excess nutrients in the lake. Excess nutrient loads are stressful to aquatic life and would be detrimental to this important urban recreational area.	Medium Initiated in 2007.
Gila River San Pedro River to Mineral Creek 15050100-008 19.8 miles	Suspended sediment concentration (2006)	Sediment may pose a threat to aquatic life. Extensive monitoring will be needed to determine sources. TMDL may be complex due to the size of the watershed. Coordinate development of this TMDL with other suspended sediment TMDLs on the Gila River (see Upper Gila Watershed).	Low Initiate 2013.
Gila River Centennial Wash to Gillespie Dam 15070101-008 5 miles	Boron (total) (1992) selenium (total) (2004)	The federally protected Yuma clapper rail and Southwest willow flycatcher have been found in this area and could be negatively impacted by elevated selenium. Elevated boron can reduce crop production. Both pollutants may be associated with the extensive agriculture in the area; however, TMDL may be complex due to the large number of potential sources and seasonal influences	High Initiate in 2014.
Lake Pleasant 15070102-1100 8000 acres	Mercury in fish tissue (2006- EPA)	A fish consumption advisory for mercury was issued in 2006. Excess mercury in fish tissue can be toxic to humans and other animals that eat the fish. This lake is an important recreational area. Additional monitoring is needed to identify sources.	High . Initiate in 2014.
Mineral Creek Devils Canyon to Gila River 15050100-012B 19.6 miles	Copper (dissolved) (1992) Selenium (total) (2004)	Mining operation has been collecting samples to determine sources of selenium and causes of low dissolved oxygen. Mine will be submitting plans and initiating actions to mitigate increases in selenium concentrations within the diversion tunnel.	Low Terms of consent decree should negate need for TMDL.
	Low dissolved oxygen (2006)	Low dissolved oxygen may be due to surface water diversion around mining operation.	Low Terms of consent decree should negate need for TMDL.
<u>Painted Rock Pesticide Contamination Area:</u> A. Painted Rocks Reservoir 15070101-1020A B. Gila River reaches from Salt River to Painted Rocks Reservoir 15071010-015, -014, -010, -009, -008, -007, -005, -001 C. Salt River, Below 23 rd Ave WWTP 15060106B-001D D. Hassayampa River below Buckeye Canal 15070103-001B 99 miles (total) 100 acres (total)	DDT metabolites, toxaphene, and chlordane in fish tissue (2002- EPA)	These pesticides still present a high risk to aquatic life and species that prey on them, including humans. A fish consumption advisory is issued. Federally protected Yuma clapper rail and Southwest willow flycatchers sighted in this area could be negatively impacted by the pesticides. This will be a very complex TMDL due to the size of the drainage area and potential sources. This TMDL will require significant monitoring resources to determine any current sources of these historically used pesticides. These pesticides have been banned from use for more than 30 years.	High Initiate when the Lake maintains a stable pool. Initiate stream TMDL in 2014.
Queen Creek Headwaters to Superior WWTP 15050100-014A 8.8 miles	Copper (dissolved) (2002)	Copper poses a risk to aquatic life and wildlife. TMDL analysis is ongoing.	Medium Initiated in 2004.
	Lead (total) (2010)	Lead may present public health risks to people using this segment for recreation.	Medium Initiated in 2004 as part of Queen Creek copper TMDL.
Queen Creek Superior WWTP to Potts Canyon 15050100-014B 5.9 miles	Copper (dissolved) (2004)	Included with Queen Creek Copper TMDL project discussed above, see Queen Creek (Headwaters to Superior WWTP)	Medium Initiated in 2004.

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Queen Creek Potts Canyon to Whitlow Canyon 15050100-014C 8.0 miles	Copper (dissolved) (2010)	Included with Queen Creek Copper TMDL project discussed above, see Queen Creek (Headwaters to Superior WWTP)	Medium Initiated in 2004.
Tributary to Queen Creek Headwaters to Queen Creek 15050100-991 2.0 miles	Copper (dissolved) (2010)	Included with Queen Creek Copper TMDL project discussed above, see Queen Creek (Headwaters to Superior WWTP)	Medium Initiated in 2004 as part of Queen Creek copper TMDL.
Unnamed Tributary to Queen Creek Headwaters to Queen Creek 15050100-1843 1.7 miles	Copper (dissolved) (2010)	Included with Queen Creek Copper TMDL project discussed above, see Queen Creek (Headwaters to Superior WWTP)	Medium Initiated in 2004 as part of Queen Creek copper TMDL.
Unnamed Tributary to Queen Creek Headwaters to Queen Creek 15050100-472 0.5 miles	Copper (dissolved) (2010)	Included with Queen Creek Copper TMDL project discussed above, see Queen Creek (Headwaters to Superior WWTP)	Medium Initiated in 2004 as part of Queen Creek copper TMDL.
Salt Watershed			
Christopher Creek Headwaters to Tonto Creek 15060105-353 8.0 miles	Phosphorus (2006)	<i>E. coli</i> bacteria TMDLs were completed in 2004. Actions to reduce <i>E. coli</i> bacteria loadings will also reduce phosphorus loadings; therefore, development of a phosphorus TMDL is a low priority.	Low To initiate in 2016.
<u>Low dissolved oxygen in Salt River and its reservoirs</u> 1. Apache Lake 15060106A-0070 2. Canyon Lake 15060106A-0250 3. Salt River Stewart Mountain Dam to Verde River 15060106A-003 10 miles 2347 acres (total)	Low dissolved oxygen (2004- EPA- Canyon Lake and Salt River) (2006- EPA - Apache Lake)	Low dissolved oxygen can be a symptom of excess nutrient loads. Such loadings can be stressful to aquatic life and even lead to fish kills, which would be detrimental to this important recreational area. DEQ intends to coordinate development of TMDLs within the Salt River chain of reservoirs.	Medium To initiate in 2015.
Crescent Lake 15060101-0420 157 acres	High pH (2002- EPA)	Excess nutrient loads can lead to fish kills, which would be detrimental to this important recreational area. Investigation and monitoring is needed to identify sources. Narrative nutrient implementation guidance, when adopted, will be used to determine if the high pH is related to excess nutrients in the lake. Recent Wallow wildfire will delay further data collection.	Medium Initiate in 2010.
Five Point Mountain Headwaters to Pinto Creek 15060103-885 2.9 miles	Copper (dissolved) (2006)	Site specific criteria are currently being developed in support of a Phase II Copper TMDL. The federally protected Colorado pikeminnow occurs in this area and could be negatively impacted by the copper.	High Initiated in 2004. Adoption of Site Specific Dissolved Copper Standard necessary to complete TMDL.
Pinto Creek West Fork Pinto Creek to Roosevelt Lake 15060103-018C 17.8 miles	Selenium (total) (2004)	The federally protected Colorado pikeminnow and bald eagle both occur in this area and could be negatively impacted by the selenium.	High Initiate in 2013.
Roosevelt Lake 15060103-1240 18345 acres	Mercury in Fish Tissue (2006- EPA)	A fish consumption advisory for mercury was issued in 2006. Excess mercury in fish tissue can be toxic to humans and other animals that eat the fish. This lake is an important recreational area. Additional monitoring is needed to identify sources.	High Initiate in 2014.

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Salt River Pinal Creek to Roosevelt Dam 15060103-004 7.5 miles	Suspended sediment concentration (2006)	Chronically elevated suspended sediment can have negative impacts on aquatic life, especially during critical periods of reproduction. Sediment may be transporting pollutants into Roosevelt Lake, an important reservoir and recreational area.	Medium Initiate in 2015.
	Nitrogen and phosphorus (2010)	Excess nitrogen and phosphorus may impact aquatic life and promote algal growth.	Medium Initiate in 2015.
	<i>E.coli</i> (2010)	Exceedances of <i>E. coli</i> bacteria criteria may represent a public health concern if people are swimming or even wading in the water. Exceedances occurred during storm events.	Medium Initiate in 2015.
Tonto Creek Headwaters to unnamed tributary 15060105-013A 8.1 miles	Low dissolved oxygen (2006)	Nitrogen and <i>E. coli</i> bacteria TMDLs were completed in 2004. Actions to reduce nitrogen and <i>E. coli</i> bacteria loadings will also increase dissolved oxygen; therefore, development of the dissolved oxygen TMDL are a low priority.	Low Initiate in 2016.
San Pedro Watershed			
Brewery Gulch Headwaters to Mule Gulch 15080301-337 1 mile	Copper (dissolved) (2004)	Included with the Mule Gulch TMDL. See Mule Gulch (Bisbee WWTP discharge to Highway 80 bridge) discussion below.	Medium Initiated in 2000. Adoption of Site Specific Standard necessary to complete TMDL.
Mule Gulch Headwaters to Lavender Pit 15080301-090A 3 miles	Copper (dissolved) (1990)	Included with the Mule Gulch TMDL. See Mule Gulch (Bisbee WWTP discharge to Highway 80 bridge) discussion below.	Medium Initiated in 2000. Adoption of Site Specific Standard necessary to complete TMDL.
Mule Gulch Lavender Pit to Bisbee WWTP discharge 15080301-090B 0.8 miles	Low pH (2002- EPA), copper (dissolved) (1990)	Included with the Mule Gulch TMDL. See Mule Gulch (Bisbee WWTP discharge to Highway 80 bridge) discussion below.	Medium Initiated in 2000. Adoption of Site Specific Standard necessary to complete TMDL.
Mule Gulch Bisbee WWTP discharge to Highway 80 bridge 15080301- 090C 3.8 miles	Copper (total and dissolved), cadmium (dissolved), zinc (dissolved) and low pH (1990)	Currently establishing site-specific criteria in support of a TMDL. This metal contamination represents a significant threat to wildlife and human health due to the magnitude and frequency of the exceedances.	Medium Initiated in 2000. Adoption of Site Specific Standard necessary to complete TMDL.
San Pedro River Mexico border to Charleston 15050202-008 28.3 miles	<i>E.coli</i> (2010)	Exceedances of <i>E. coli</i> bacteria criteria may represent a public health concern if people are swimming or even wading in the water. Exceedances occurred during high flow events where recreational contact would be minimal.	Low Initiate in 2016.
	Copper (dissolved) (2010)	Copper poses a risk to aquatic life and wildlife. Sources may be located in Mexico near Cananea.	Medium Initiate in 2016.
San Pedro River Babocomari Creek to Dagoon Wash 15050202-003 17 miles	<i>E. coli</i> (2004)	Exceedances of <i>E. coli</i> bacteria criteria may represent a public health concern if people are swimming or even wading in the water. The Coronado RCD is currently developing a Watershed Improvement Plan which may negate the need for a TMDL.	High Initiate TMDL as needed based upon implementation of Watershed Improvement Plan.
San Pedro River Dagoon Wash to Tres Alamos Wash 15050202-002 16 miles	<i>E. coli</i> (2010)	Exceedances of <i>E. coli</i> bacteria criteria may represent a public health concern if people are swimming or even wading in the water. Exceedances occurred under both high and low flow conditions. The Coronado RCD is currently developing a Watershed Improvement Plan for the adjacent upstream reach which may negate the need for a TMDL.	High Initiate TMDL as needed based upon implementation of Watershed Improvement Plan.
San Pedro River Aravaipa Creek to Gila River 15050203-001 14.8 miles	<i>E. coli</i> (2004)	Exceedances of <i>E. coli</i> bacteria criteria may represent a public health concern if people are swimming or even wading in the water. The large drainage area may make identifying sources more difficult.	High Initiated in 2006.

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Santa Cruz Watershed			
Nogales Wash Mexico border to Potrero Creek 15050301-011 6 miles	Ammonia (2004), chlorine (1996), copper (dissolved) (2004), <i>E. coli</i> (1998)	Exceedances of <i>E. coli</i> bacteria criteria may represent a public health concern if people are swimming or even wading in the water. Ammonia, chlorine, copper, and low dissolved oxygen are significant threats to aquatic life. Deteriorated infrastructure in Mexico sends raw sewage into Arizona. Implementing corrective actions requires funding and is dependent on international negotiations. Chlorine is added to the raw sewage due to human health concerns.	Low Initiate in 2013.
Parker Canyon Lake 15050301-1040 130 acres	Mercury in fish tissue (2004- EPA)	Fish consumption advisory issued. Excess mercury in fish tissue can be toxic to humans and other animals that eat the fish. Lake is an important recreational area. Additional monitoring is needed to identify sources. ADEQ will be collecting atmospheric deposition data in support of mercury TMDLs.	High Initiated in 2006.
Potrero Creek Interstate 19 to Santa Cruz River 15050301- 500B 4.9 miles	Chlorine (2010)	Chlorine is a significant threat to aquatic life.	Medium Initiate in 2013.
	Low dissolved oxygen (2010)	Low dissolved oxygen can be a symptom of excess nutrient loads. Such loadings can be stressful to aquatic life.	Medium Initiate in 2013.
	<i>E. coli</i> (2010)	Exceedances of <i>E. coli</i> bacteria criteria may represent a public health concern if people are swimming or even wading in the water.	High Initiate in 2013.
Rose Canyon Lake 15050302-1260 7 acres	Low pH (2004- EPA)	Low pH poses risks to aquatic life because it allows the release of toxic metals from the lake bottom sediments into the water column. A major wildfire occurred in 2003 in the drainage area of this small, deep recreational attraction on Mount Lemmon. Although exceedances occurred prior to the fire, the TMDL will also need to look at long term impacts of this fire on lake pH.	Medium Initiate in 2011.
Santa Cruz River Josephine Canyon to Tubac Bridge 15050301-008A 4.8 miles	<i>E. coli</i> (2010)	Exceedances of <i>E. coli</i> bacteria criteria may represent a public health concern if people are swimming or even wading in the water. Several years of drought has interfered with collecting samples to determine source loadings. TMDL may be more complex because sources contributions may be in Mexico.	High Initiate in 2013.
	Ammonia (2010)	Ammonia poses a significant threat to aquatic life due to its toxic nature. Elevated ammonia levels may be associated with WWTP discharges.	Medium Initiate in 2013.
Sonoita Creek 1600 feet below WWTP to Patagonia Lake 15050301-013C 8.9 miles	Zinc (dissolved) (2004)	The federally protected Gila topminnow occurs in this reach and could be negatively impacted by dissolved zinc. Source of zinc has not been investigated; however, zinc is impairing both Alum Gulch and Three R Canyon, which are tributaries located upstream (TMDLs completed on those tributaries in 2003).	High To initiate in 2014.
	Low dissolved oxygen (1998)	The federally protected Gila topminnow occurs in this reach and could be negatively impacted by low dissolved oxygen. The low dissolved oxygen occurs immediately below the Patagonia WWTP discharge and in an area of ground water upwelling.	High To initiate in 2014.
Upper Gila Watershed			
Blue River Strayhorse Creek to San Francisco River 15040004-025B 25.4 Miles	<i>E. coli</i> (2006)	Exceedances of <i>E. coli</i> bacteria criteria may represent a public health concern if people are swimming or even wading in the water. The Gila Watershed Partnership is developing a Watershed Improvement Plan for this area which may negate the need for a TMDL to be developed. Although this reach is not included in the Partnerships project the plan may lead to improvements with out a TMDL.	High Initiate TMDL as needed based upon implementation of Watershed Improvement Plan.

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Cave Creek Headwaters to South Fork of Cave Creek 15040006-852A 7.5 miles	Selenium (total) (2004)	Selenium may be toxic to aquatic life or species that feed on them. This stream is classified as a "Outstanding Arizona Water." Initial investigations using lower laboratory detection limits show no exceedances. Additional monitoring is needed to confirm attainment but recent wildfire (Horseshoe 2) may hinder data collection.	Medium Initiated in 2006.
Gila River New Mexico border to Bitter Creek 15040002-004 16.3 miles	<i>E. coli</i> (2006)	Exceedances of <i>E. coli</i> bacteria criteria may represent a public health concern if people are swimming or even wading in the water. The Gila Watershed Partnership is interested in maintaining high quality water in the Gila River and its tributaries. The TMDL is complex due to the size of the watershed (nearly 8,000 square miles extending into New Mexico).	High Initiated in 2006.
	Suspended sediment concentration (2006)	Suspended sediment may pose a risk to aquatic life. The Gila Watershed Partnership is interested in maintaining high quality water in the Gila River and its tributaries. The TMDL is complex due to the size of the watershed that extends into New Mexico (nearly 8,000 square miles). TMDL development along the Gila River will be coordinated.	Low Initiated in 2006.
Gila River Apache Creek to Skully Creek 15040002-002 6.4 miles	<i>E. coli</i> (2010)	Exceedances of <i>E. coli</i> bacteria criteria may represent a public health concern if people are swimming or even wading in the water. Exceedances occurred under low and high flows. This reach falls within the larger Gila River <i>E. coli</i> TMDL which extended from the New Mexico Border to Yuma Wash.	High Initiate in 2012.
Gila River Skully Creek to San Francisco River 15040002-001 15.2 miles	<i>E. coli</i> (2010)	Exceedances of <i>E. coli</i> bacteria criteria may represent a public health concern if people are swimming or even wading in the water. Exceedances occurred under low and high flows. This reach falls within the larger Gila River <i>E. coli</i> TMDL which extended from the New Mexico Border to Yuma Wash.	High Initiate in 2012. .
Gila River Bonita Creek to Yuma Wash 15040005-022 6 miles	Suspended sediment concentration (2004- EPA)	Sediment may pose a risk to aquatic life. The Gila Watershed Partnership is interested in maintaining high quality water in the Gila River and its tributaries. The TMDLs are complex due to the size of the watershed that extends into New Mexico (nearly 8,000 square miles). ADEQ will coordinate with <i>E. coli</i> TMDL on the same reach.	Medium Initiated in 2006.
Gila River Bonita Creek to Yuma Wash 15040005-022 6 miles	<i>E. coli</i> (2004)	Exceedances of <i>E. coli</i> bacteria criteria may represent a public health concern if people are swimming or even wading in the water.	High Initiated in 2006.
	Lead (total) (2010)	Lead may present public health risks to people using this segment for swimming.	Medium Initiate in 2015.
San Francisco River Blue River to Limestone Gulch 15040004-003 18.7 miles	<i>E. coli</i> (2006)	Exceedances of <i>E. coli</i> bacteria criteria may represent a public health concern if people are swimming or even wading in the water. The Gila Watershed Partnership is developing a Watershed Improvement Plan for this area which may negate the need for a TMDL to be developed.	High Initiate TMDL as needed based upon implementation of Watershed Improvement Plan.
San Francisco River Limestone Gulch to Gila River 15040004-001 12.8 miles	<i>E. coli</i> (2010)	Exceedances of <i>E. coli</i> bacteria criteria may represent a public health concern if people are swimming or even wading in the water. Majority of exceedances occurred under elevated flows. The Gila Watershed Partnership is developing a Watershed Improvement Plan for this area which may negate the need for a TMDL to be developed.	Medium. To initiate as needed based upon implementation of Watershed Improvement Plan.

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Verde Watershed			
East Verde River Ellison Creek to American Gulch 15060203-022B 20 miles	Selenium (total) (2004)	Selenium may be toxic to aquatic life or species that feed on them. Monitoring is needed to determine source loadings and contribution from natural sources. The selenium is only slightly over the water quality criteria, so it is not known whether federally protected Gila trout occurs in this area will be negatively impacted by the elevated selenium.	Low Initiated in 2010.
East Verde River American Gulch to Verde River 15060203-022C 26 miles	Arsenic (total) and boron (total) (2006)	Arsenic and boron may present public health risks to people using this segment as a drinking water source or for swimming.	High Initiated in 2010.
Granite Creek Headwaters to Willow Creek 15060202-059A 13.4 miles	<i>E. coli</i> (2010)	Exceedances of <i>E. coli</i> bacteria criteria may represent a public health concern if people are swimming or even wading in the water. Exceedances occurred during storm events.	Medium Initiated in 2007 as part of Granite Creek/Watson Lake TMDL project.
	Low dissolved oxygen (2004- EPA)	Low dissolved oxygen maybe related to nutrient loading. Excess nutrient loads can lead to fish kills. Investigation and monitoring is needed to identify sources.	Low Initiated in 2007
Miller Creek Headwaters to Granite Creek 15060202-767 7.2 miles	<i>E. coli</i> (2010)	Exceedances of <i>E. coli</i> bacteria criteria may represent a public health concern if people are swimming or even wading in the water. Exceedances occurred during storm events.	Medium Initiated in 2007 as part of Granite Creek/Watson Lake TMDL project.
Verde River Bartlatt Dam to Camp Creek 15060203-004 6.6 miles	Arsenic (total) (2010)	Arsenic may present public health risks to people using this segment as a drinking water source or for swimming.	High Initiate in 2013.
Watson Lake 15060202-1590 150 acres	Nitrogen, low dissolved oxygen, high pH (2004- EPA)	Excess nutrient loads can lead to fish kills, which would be detrimental to this important recreational area. Use narrative nutrient implementation guidance, when adopted, to determine if excess nutrients are impairing the lake. Investigation and monitoring is needed to identify sources.	Medium Initiated in 2007.

To establish this priority list and schedule the following factors were considered. Those waters with high priority factors will be targeted for TMDL within two years following EPA approval of the 303(d) List, unless specific low priority factors are also cited.

High Priority Factors:

1. Substantial threat to health and safety of humans, aquatic life, or wildlife based on
 - a. Number and type of designated uses impaired,
 - b. Type and extent of risk from the impairment to human health or aquatic life,
 - c. Pollutant causing the impairment, or
 - d. Severity, magnitude, and duration the surface water quality standard was exceeded.
2. A new or modified individual NPDES / AZPDES permit is sought for discharge to the impaired water.
3. Surface water is listed as a Outstanding Arizona Water or is part of an area classified as a “wilderness area”, “wild and scenic river” or other federal or state special protection of the water resource.
4. A species listed as “threatened” or “endangered” under the federal Endangered Species Act inhabits an area and the presence of the pollutant in the surface water is likely to jeopardize the listed species.
5. A delay in conducting the TMDL could jeopardize ADEQ’s ability to gather sufficient credible data necessary to develop the TMDL.
6. There is significant public interest and support for development of a TMDL.
7. The surface water or segment has important recreational and economic significance to the public.
8. The pollutant has been listed for eight years or more (starting with the 2002 listing).

Medium Priority Factors:

1. The surface water fails to meet more than one designated use.
2. The pollutant exceeds more than one surface water quality standard.
3. The exceedance is correlated to seasonal conditions caused by natural events such as storms, weather patterns, or lake turnover.
4. Actions in the watershed may result in the surface water attaining applicable water quality standards; however, load reductions may take longer than the next 303(d) listing cycle.
5. The type of pollutant and other factors relating to the surface water or segment make the TMDL very complex.
6. ADEQ’s administrative needs, including TMDL schedule commitments with EPA, permitting needs, or basin priorities that require completion of the TMDL.

Low Priority Factors:

1. ADEQ has formally submitted a proposal to delist the surface water or pollutant to EPA. If ADEQ makes the submission outside of listing process cycle, the change in priority ranking will not be effective until EPA approves the report.
2. ADEQ has modified or formally proposed a modification to the applicable surface water quality standard or designated use which would result in the surface water no longer being impaired, but the modification has not yet been approved by EPA.
3. The surface water is expected to attain surface water quality standards due to any of the following:
 - a. Recently instituted treatment levels or best management practices in the drainage area,
 - b. Discharges or activities related to the impairment have ceased, or
 - c. Actions have been taken and the controls are in place or scheduled for implementation that are likely to bring the surface water back into compliance.
4. The surface water is ephemeral or intermittent. ADEQ shall re-prioritize the surface water if the presence of the pollutant in the listed water poses a threat to the health and safety of humans, aquatic life, or wildlife using the water (High priority 1) or the pollutant is contributing to the impairment of a downstream, perennial surface water.
5. The pollutant poses a low ecological and human health risk.
6. Insufficient data exist to determine the source of the pollutant load.
7. The uncertainty of timely coordination with national and international entities concerning international waters makes TMDL development complex.
8. Naturally occurring conditions are a major contributor to the impairment, and a site specific standard will need to be developed before the TMDL can be completed.
9. No documentation or effective analytical tools exist to develop a TMDL for the surface water with reasonable accuracy.